



June 2011

**Bachelor of Science in Aerospace Engineering
University of Washington
Extension of Modified B.S. Aeronautical and Astronautical
Engineering Program to Abu Dhabi**

Proposed Change Description and Rationale

The University of Washington (UW) seeks approval to offer a B.S. in Aerospace Engineering degree at the United Arab Emirates University (UAEU) in Abu Dhabi, United Arab Emirates, beginning Fall 2013. The proposed program would be modeled after the B.S. Aeronautical and Astronautical Engineering program offered by the UW's Department of Aeronautics and Astronautics in Seattle. It would include significantly less astronautics content and would not share the UW's ABET accreditation; therefore, it would be offered under a different name than its parent program.

The proposed program would be part of a large-scale research and education collaboration between the department and the UAEU designed to help the United Arab Emirates build aerospace engineering capacity. Funding would be provided through a ten-year, \$100 million contract. Under the contract, the UW and the UAEU would collaboratively conduct research and offer the proposed program through 2021. Funding would be primarily provided by the Mubadala Corporation, an investment company which is owned by the Crown Prince of Abu Dhabi and holds \$2.3 trillion in cash reserves.

The proposed program would be a degree completion program covering students' junior and senior years of study. To implement it, the UW and the UAEU would jointly recruit and hire qualified faculty, and the UW would mentor them as they spend a minimum of two quarters teaching, learning the curriculum, and starting research collaborations in Seattle. These new hires would have qualifications similar to those of the Department of Aeronautics and Astronautics' regular faculty. After their mentorship at the UW Seattle campus, new hires would travel to the UAEU to teach with tenure-track status there and affiliate status at the UW. In addition, current UW faculty would travel to Abu Dhabi to teach for a quarter. The department would maintain a full-time faculty program coordinator in Abu Dhabi, along with three FTE student services, advising, and support staff.

During the contract period, students in Abu Dhabi would graduate with a B.S. Aerospace Engineering degree from each institution (dual degrees). The proposed program would serve 36 FTE students the first year, increasing to 71 FTE students by academic year 2018. By academic year 2021, the UW would no longer offer the degree, but the UAEU would continue to do so.

In addition, up to eight FTE students from Abu Dhabi per year would enroll in the B.S. Aeronautical and Astronautical Engineering in Seattle on a fee basis. According to program planners, these students would not displace Washington state residents from the Seattle program. The UW would also offer its online Master of Aeronautical and Astronautical Engineering degree to students in Abu Dhabi and provide on-site mentors.

The UW would like to enter the contract in order to achieve all of the following goals:

- Internationalization of education through contact with students from Abu Dhabi
- Additional faculty resources for Seattle
- International research collaborations
- Enhancement of UW's brand as a leader in international education
- Increased trade for Washington state

Staff Analysis and Recommendation

The UW submitted a location notice of intent (LNOI) to offer the proposed program in Abu Dhabi. Although the Board has delegated LNOI approval to staff, a Board vote is necessary in this case because the proposed program's name, curriculum, and ABET accreditation status differs from those of its parent program. The UAEU already has ABET accreditation for its mechanical, civil and environmental, chemical and petroleum, and architectural engineering degrees. The UW would assist The UAEU in obtaining accreditation for the proposed aerospace engineering program.

The proposed program is part of a contractual arrangement that would support UW's research mission through collaborative research involving UW and UAEU faculty. By providing research funding, the contractual arrangement would also support the *Strategic Master Plan* goal of promoting economic growth and innovation. The proposed program would not require any state funding. Moreover, the contract would guarantee funding regardless of whether enrollment targets are met.

Students in Seattle would benefit from interacting with Abu Dhabi students, who would increase diversity in the B.S. Aeronautical and Astronautical Engineering program. Washington employers would benefit from increased exports. According to the LNOI, "This program and partnership has been proposed by the Boeing Company to help with their sales of aircraft in Abu Dhabi." The Boeing Company submitted a letter of support.

After careful review of the location notice of intent and supporting materials, HECB staff recommends approval for the University of Washington to offer the B.S. Aerospace Engineering at the United Arab Emirates University in Abu Dhabi, subject to the following two-part condition:

Prior to recruiting or enrolling students, the University of Washington must ensure that B.S. Aerospace Engineering web pages, marketing materials, and recruiting personnel inform prospective students (1) that the UW's ABET accreditation will not apply to its B.S. Aerospace Engineering degree; and (2) about any significant ramifications this lack of accreditation has for students or graduates including, but not limited to, implications for professional examinations and licensure.

